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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/858,402	05/16/2001	Khaled A. Al-Zoubi	1266-001	2460

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EXAMINER

SIMONE, CATHERINE A

ART UNIT	PAPER NUMBER
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1772

DATE MAILED: 10/21/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/858,402

Applicant(s)

AL-ZOUBI ET AL.

Examiner

Catherine Simone

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 19 July 2004.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-15 is/are pending in the application.
- 4a) Of the above claim(s) 15 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-14 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date _____
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____

DETAILED ACTION

Withdrawn Objection

1. The objection to claim 10 under 37 CFR 1.75(C) of record in the Office Action mailed 3/25/04, Page 2, Paragraph #4 has been withdrawn due to the Applicants amendment filed 7/19/04.

Specification

2. The amendment filed 7/19/04 is objected to under 35 U.S.C. 132 because it introduces new matter into the disclosure. 35 U.S.C. 132 states that no amendment shall introduce new matter into the disclosure of the invention. The added material which is not supported by the original disclosure is as follows: The recitation "above the ground" is deemed new matter.

Applicant is required to cancel the new matter in the reply to this Office Action.

Claim Rejections - 35 USC § 112

3. The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.
4. Claims 1-14 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed

invention. The recitation “above the ground” in claim 1 is deemed new matter. The specification, as originally filed, does not provide support for the invention as is now claimed.

Claim Rejections - 35 USC § 102

5. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

6. **Claims 1, 3, 4, 7, 11, and 12** are rejected under 35 U.S.C. 102(b) as being anticipated by Landers (4,779,389).

Landers discloses an integrated, monopole reinforcement sleeve system for reinforcing monopoles in areas of stress, comprising at least one pair of complementary hemi-sleeves (Fig. 2, #32 and #33; also see col. 6, lines 21-24) attachable above the ground to a monopole (Fig. 2, #21; also see col. 6, lines 28-35) to reinforce the monopole at predetermined locations that are overstressed without adding new lateral stress to the monopole at the predetermined locations; and a non-slip filler (see col. 9, lines 28-32); wherein the non-slip filler is inserted between the at least one pair of complementary hemi-sleeves and the monopole (see col. 9, lines 28-32) at the predetermined locations that are overstressed; and the at least one pair of complementary hemi-sleeves are tightened around the monopole and fixed thereto by fasteners (see col. 6, lines 31-34), to form an integral reinforcing sleeve system for existing monopoles to reinforce the predetermined overstressed locations and to reinforce the monopole against lateral forces acting thereon; thereby providing integrated monopole reinforcement. Regarding **claim 3**, note the at

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least one pair of complementary hemi-sleeves (Fig. 2, #32 and #33) are shaped to approximate the shape of the monopole surface (see col. 6, lines 32-34). Regarding **claim 4**, note the at least one pair of complementary hemi-sleeves have a circular shape (Fig. 2, #32 and #33). Regarding **claim 7**, note the at least one pair of complementary hemi-sleeves (Figs. 1 and 2, #32 and #33) are located at a predetermined, select position on the monopole (Figs. 1 and 2, #21) for optimal reinforcement of the monopole against lateral stresses, in particular due to the appurtenances attached to the monopole. Regarding **claim 11**, note the non-slip filler is a foam (see col. 9, lines 29-32). Regarding **claim 12**, note the non-slip filler is combined with the at least one pair of complementary hemi-sleeves and attached to a monopole in a snug-fitting manner without gaps between the at least one pair of complementary hemi-sleeves and the monopole (see col. 9, lines 28-32).

7. **Claims 1, 3, 4, 7, 11 and 12** are rejected under 35 U.S.C. 102(b) as being anticipated by Kinnan (4,697,649).

Kinnan discloses an integrated, monopole reinforcement sleeve system for reinforcing monopoles in areas of stress, comprising at least one pair of complementary hemi-sleeves (Figs. 2-5, #32; see col. 8, lines 19-22) attachable above the ground to a monopole (Figs. 3-5, #20) to reinforce the monopole at predetermined locations that are overstressed without adding new lateral stress to the monopole at the predetermined locations; and a non-slip filler (Fig. 10, #230; also see col. 14, lines 13-15); wherein the non-slip filler (fig. 10, #230) is inserted between the at least one pair of complementary hemi-sleeves (Fig. 10, #32) and the monopole (Fig. 10, #20) at the predetermined locations that are overstressed; and the at least one pair of complementary hemi-sleeves are tightened around the monopole and fixed thereto by fasteners (see col. 8, lines

26-30), to form an integral reinforcing sleeve system for existing monopoles to reinforce the predetermined overstressed locations and to reinforce the monopole against lateral forces acting thereon; thereby providing integrated monopole reinforcement. Regarding **claim 3**, note the at least one pair of complementary hemi-sleeves (Fig. 4, #32) are shaped to approximate the shape of the monopole surface (Fig. 4, #20). Regarding **claim 4**, note the at least one pair of complementary hemi-sleeves have a circular shape (Fig. 5, #32). Regarding **claim 7**, note the at least one pair of complementary hemi-sleeves (Figs. 3 and 4, #32) are located at a predetermined, select position on the monopole (Figs. 3 and 4, #20) for optimal reinforcement of the monopole against lateral stresses, in particular due to the appurtenances attached to the monopole.

Regarding **claim 11**, note the non-slip filler is a polymer (see col. 14, line 21). Regarding **claim 12**, note the non-slip filler (Fig. 10, #230) is combined with the at least one pair of complementary hemi-sleeves (Fig. 10, #32) and attached to a monopole (Fig. 10, #20) in a snug-fitting manner without gaps between the at least one pair of complementary hemi-sleeves (Fig. 10, #32) and the monopole (Fig. 10, #20).

8. **Claims 1-4, 7, 9, 11 and 12** are rejected under 35 U.S.C. 102(b) as being anticipated by Phillips (4,702,057).

Phillips discloses an integrated, monopole reinforcement sleeve system for reinforcing monopoles in areas of stress, comprising at least one pair of complementary hemi-sleeves (Fig. 2, #5) attachable above the ground to a monopole (Fig. 2, #1) to reinforce the monopole at predetermined locations that are overstressed without adding new lateral stress to the monopole at the predetermined locations; and a non-slip filler (Fig. 2, #7); wherein the non-slip filler (Fig. 2, #7) is inserted between the at least one pair of complementary hemi-sleeves (Fig. 2, #5) and

the monopole (Fig. 2, #1) at the predetermined locations that are overstressed; and the at least one pair of complementary hemi-sleeves are tightened around the monopole and fixed thereto by fasteners (see col. 3, lines 65-68 and col. 4, lines 1-6), to form an integral reinforcing sleeve system for existing monopoles to reinforce the predetermined overstressed locations and to reinforce the monopole against lateral forces acting thereon; thereby providing integrated monopole reinforcement. Regarding **claim 2**, note the at least one pair of complementary hemi-sleeves (Fig. 2, #5) include corresponding flanges (Fig. 2, #6) for fastening the at least one pair of complementary hemi-sleeves to the predetermined overstressed locations of the monopole. Regarding **claim 3**, note the at least one pair of complementary hemi-sleeves (Fig. 2, #5) are shaped to approximate the shape of the monopole surface (Fig. 2, #1). Regarding **claim 4**, note the at least one pair of complementary hemi-sleeves have a circular shape (Fig. 2, #5). Regarding **claim 7**, note the at least one pair of complementary hemi-sleeves (Figs. 2 and 4, #5) are located at a predetermined, select position on the monopole (Figs. 2 and 4, #1) for optimal reinforcement of the monopole against lateral stresses, in particular due to the appurtenances attached to the monopole. Regarding **claim 9**, note the non-slip filler is an elastic polymer (see col. 5, line 34). Regarding **claim 11**, note the non-slip filler is a foam (see col. 5, line 34). Regarding **claim 12**, note the non-slip filler (Fig. 2, #7) is combined with the at least one pair of complementary hemi-sleeves (Fig. 2, #5) and attached to a monopole (Fig. 2, #1) in a snug-fitting manner without gaps between the at least one pair of complementary hemi-sleeves and the monopole (see col. 4, lines 15-21).

Claim Rejections - 35 USC § 103

9. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

10. **Claims 5 and 6** are rejected under 35 U.S.C. 103(a) as being unpatentable over Landers (4,779,389) or Kinnan (4,697,649) or Phillips (4,702,057).

Landers, Kinnan and Phillips each disclose an integrated, monopole reinforcement sleeve system for reinforcing monopoles in areas of stress, comprising at least one pair of complementary hemi-sleeves attachable above the ground to a monopole to reinforce the monopole at predetermined locations that are overstressed without adding new lateral stress to the monopole at the predetermined locations; and a non-slip filler; wherein the non-slip filler is inserted between the at least one pair of complementary hemi-sleeves and the monopole at the predetermined locations that are overstressed; and the at least one pair of complementary hemi-sleeves are tightened around the monopole and fixed thereto by fasteners, to form an integral reinforcing sleeve system for existing monopoles to reinforce the predetermined overstressed locations and to reinforce the monopole against lateral forces acting thereon; thereby providing integrated monopole reinforcement. However, Landers, Kinnan and Phillips each fails to disclose the at least one pair of complementary hemi-sleeves having a non-circular shape, such as polygonal shape.

Normally, it is to be expected that a change in shape of the at least one pair of complementary hemi-sleeves would be an unpatentable modification. Under some

circumstances, however, changes such as shape may impart patentability to a product if the particular shape claimed produces a new and unexpected result which is different in kind and not merely in degree from the results of the prior art. *In re Dailey et al*, 149 USPQ 47 CCPA 1966. Therefore, it would have been obvious to one of ordinary skill in the art at the time the applicant's invention was made to change the shape of the at least one pair of complementary hemi-sleeves in Landers, Kinnan or Phillips to be of a polygonal shape. One skilled in the art would have been motivated to do so in order to form an integrated, monopole reinforcement sleeve system, since it has been held that the change in form or shape of the at least one pair of complementary hemi-sleeves would be an unpatentable modification in the absence of showing unexpected results.

11. **Claim 8** is rejected under 35 U.S.C. 103(a) as being unpatentable over Landers (4,779,389) or Kinnan (4,697,649) or Phillips (4,702,057) in view of Ritz (6,453,636).

Landers, Kinnan and Phillips each disclose an integrated, monopole reinforcement sleeve system for reinforcing monopoles in areas of stress, comprising at least one pair of complementary hemi-sleeves attachable above the ground to a monopole to reinforce the monopole at predetermined locations that are overstressed without adding new lateral stress to the monopole at the predetermined locations; and a non-slip filler; wherein the non-slip filler is inserted between the at least one pair of complementary hemi-sleeves and the monopole at the predetermined locations that are overstressed; and the at least one pair of complementary hemi-sleeves are tightened around the monopole and fixed thereto by fasteners, to form an integral reinforcing sleeve system for existing monopoles to reinforce the predetermined overstressed locations and to reinforce the monopole against lateral forces acting thereon; thereby providing

integrated monopole reinforcement. However, Landers, Kinnan and Phillips each fails to disclose multiple pairs of complementary hemi-sleeves positionable at different locations on the monopole. Ritz teaches that it is old and well-known in the analogous art to have multiple pairs of complementary hemi-sleeves positionable at different locations on a monopole (see col. 3, lines 16-18 and col. 5, lines 5-13) for the purpose of producing an integrated, monopole reinforcement sleeve system for reinforcing monopoles in areas of stress. Therefore, it would have been obvious to one of ordinary skill in the art at the time the applicant's invention was made to have provided Landers, Kinnan or Phillips with multiple pairs of complementary hemi-sleeves positionable at different locations on a monopole as suggested by Ritz in order to produce an integrated, monopole reinforcement sleeve system for reinforcing monopoles in areas of stress.

12. **Claim 10** is rejected under 35 U.S.C. 103(a) as being unpatentable over Landers (4,779,389) or Kinnan (4,697,649) or Phillips (4,702,057) in view of Fayle (6,176,062).

Landers, Kinnan and Phillips each disclose an integrated, monopole reinforcement sleeve system for reinforcing monopoles in areas of stress, comprising at least one pair of complementary hemi-sleeves attachable above the ground to a monopole to reinforce the monopole at predetermined locations that are overstressed without adding new lateral stress to the monopole at the predetermined locations; and a non-slip filler; wherein the non-slip filler is inserted between the at least one pair of complementary hemi-sleeves and the monopole at the predetermined locations that are overstressed; and the at least one pair of complementary hemi-sleeves are tightened around the monopole and fixed thereto by fasteners, to form an integral reinforcing sleeve system for existing monopoles to reinforce the predetermined overstressed

locations and to reinforce the monopole against lateral forces acting thereon; thereby providing integrated monopole reinforcement. However, Landers, Kinnan and Phillips each fails to disclose the non-slip filler being neoprene. Fayle teaches that it is old and well-known in the analogous art to have neoprene (see col. 2, lines 58-60) positioned between a pole and a sleeve for the purpose of preventing slippage between the pole and the sleeve and to further protect the pole from impacts. Therefore, it would have been obvious to one of ordinary skill in the art at the time the applicant's invention was made to have modified the non-slip filler in Landers, Kinnan or Phillips to be neoprene as suggested by Fayle in order to prevent slippage between the monopole and the hemi-sleeves and to further protect the monopole from impacts.

13. **Claims 13 and 14** are rejected under 35 U.S.C. 103(a) as being unpatentable over Landers (4,779,389) or Kinnan (4,697,649) or Phillips (4,702,057) in view of Kozikowski (4,543,764).

Landers, Kinnan and Phillips each disclose an integrated, monopole reinforcement sleeve system for reinforcing monopoles in areas of stress, comprising at least one pair of complementary hemi-sleeves attachable above the ground to a monopole to reinforce the monopole at predetermined locations that are overstressed without adding new lateral stress to the monopole at the predetermined locations; and a non-slip filler; wherein the non-slip filler is inserted between the at least one pair of complementary hemi-sleeves and the monopole at the predetermined locations that are overstressed; and the at least one pair of complementary hemi-sleeves are tightened around the monopole and fixed thereto by fasteners, to form an integral reinforcing sleeve system for existing monopoles to reinforce the predetermined overstressed locations and to reinforce the monopole against lateral forces acting thereon; thereby providing

integrated monopole reinforcement. However, Landers, Kinnan and Phillips each fails to disclose a mounting support incorporated into the at least one pair of complementary hemi-sleeves. Kozikowski teaches that it is old and well-known in the analogous art to have a mounting support, such as mounting brackets (Fig. 2, #34), incorporated into a sleeve attached to a monopole for the purpose producing an integrated, monopole reinforcement sleeve system for reinforcing monopoles in areas of stress. Therefore, it would have been obvious to one of ordinary skill in the art at the time the applicant's invention was made to have incorporated into the at least one pair of complementary hemi-sleeves of Landers, Kinnan or Phillips a mounting support, such as mounting brackets, as suggested by Kozikowski in order to produce an integrated, monopole reinforcement sleeve system for reinforcing monopoles in areas of stress.

Response to Arguments

14. Applicant's arguments filed 7/19/04 have been fully considered but they are not persuasive. Applicants argue that, "Landers requires the reinforcement sleeve system to be below ground level (see Fig. 1; also see col. 11, lines 61-62). The present invention does not require the reinforcement sleeve system to be below the ground. Furthermore, Landers makes no reference of reinforcing the monopole at predetermined locations other than at ground level." However, it is to be pointed out that Landers does teach the reinforcement sleeve system to be above ground (see Figs. 1 and 5; also see col. 6, lines 12-21). Therefore, Landers clearly teaches the present invention.

Applicants further argue that, "Kinnan also requires the reinforcement sleeve system to be below ground level (see Fig. 5; also see col. 17, lines 55-57). The present invention does not

require the reinforcement sleeve system to be below the ground. Furthermore, Kinnan makes no reference of reinforcing the monopole at predetermined locations other than at ground level.” However, it is to be pointed out that Kinnan does teach the reinforcement sleeve system to be above ground (see Figs. 3-5; also see col. 8, lines 46-53). Therefore, Kinnan clearly teaches the present invention.

Furthermore, Applicants argue that, “Phillips again requires the reinforcement sleeve system to be below ground level (see Fig. 1; see also col. 2, lines 49-50). The present invention does not require the reinforcement sleeve system to be below the ground. Additionally, Figure 4 of Phillips only shows a test apparatus for the Phillips invention and not a functional representation of a reinforcement sleeve system. The present invention is capable of being utilized at any predetermined location above the ground along the monopole.” However, it is to be pointed out that Phillips does teach the reinforcement sleeve system to be above ground (see Fig. 1; also see col. 2, lines 14-22 and 49-52). Therefore, Phillips clearly teaches the present invention.

Conclusion

15. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period

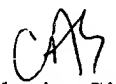
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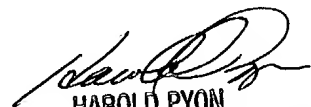
will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Catherine Simone whose telephone number is (571)272-1501. The examiner can normally be reached on 9:30-6:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Harold Pyon can be reached on (571) 272-1498. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).


Catherine Simone
Examiner
Art Unit 1772
October 8, 2004


HAROLD PYON
SUPERVISORY PATENT EXAMINER
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10/15/04